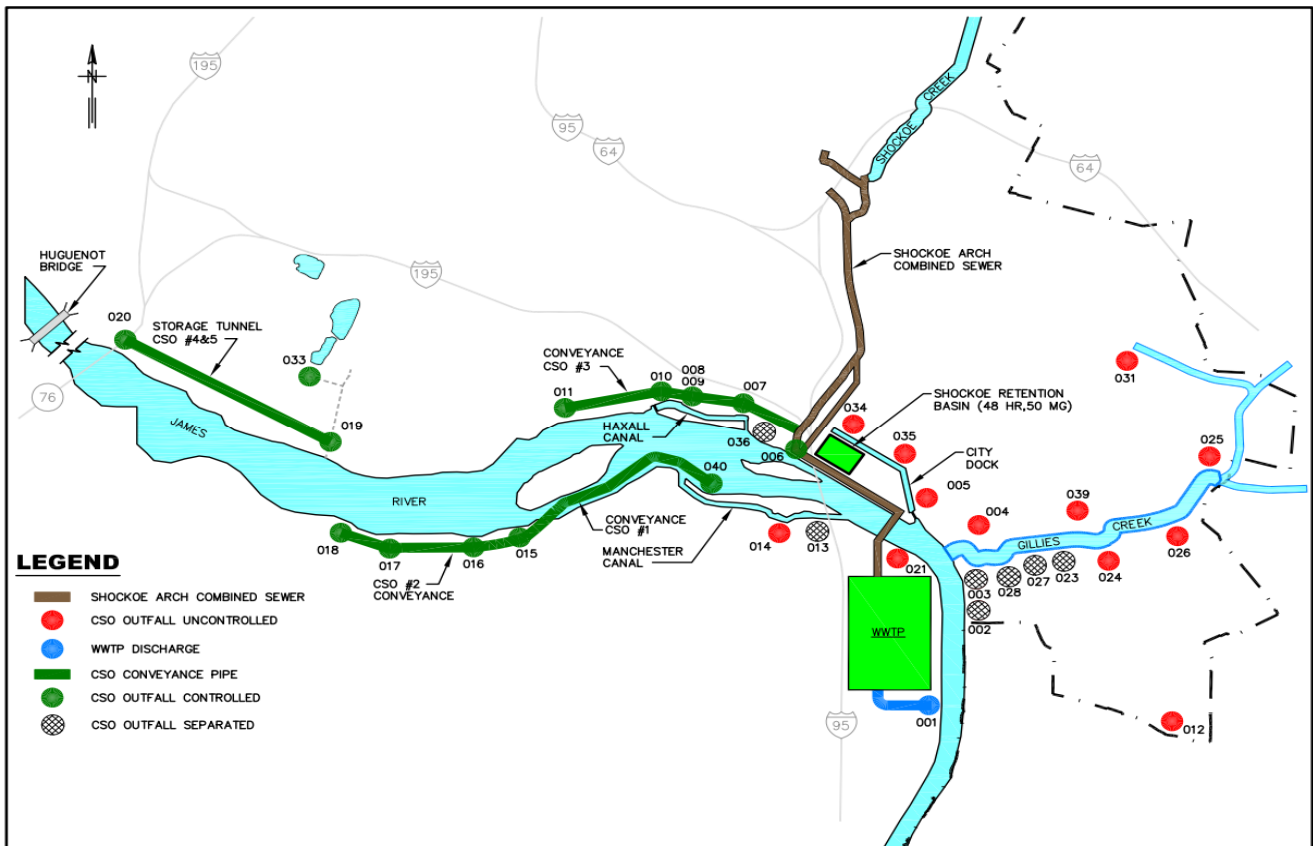


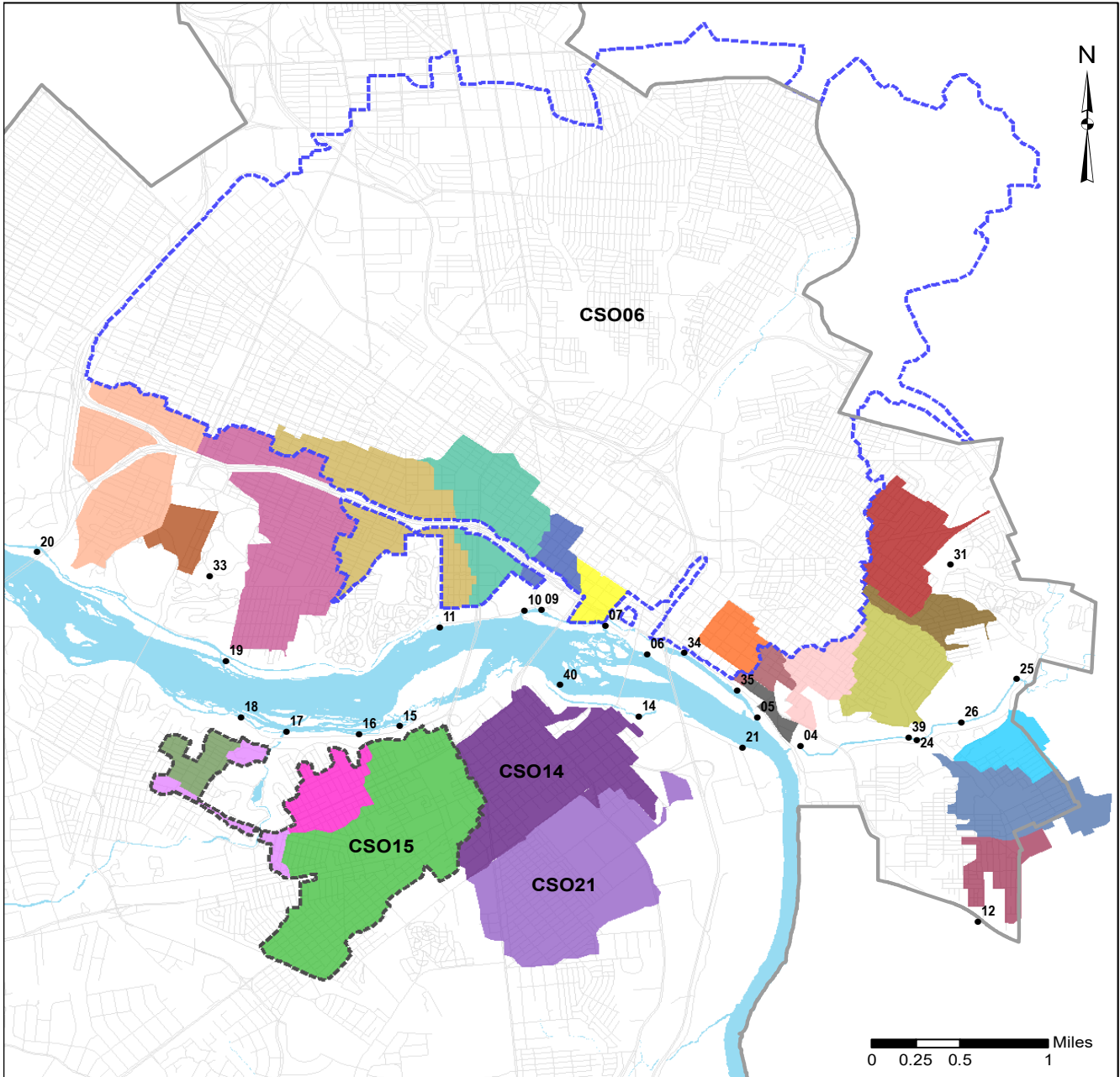
CITY OF RICHMOND, VIRGINIA  
DEPARTMENT OF PUBLIC UTILITIES

Combined Sewer Overflow Monthly Report

January, 2020



# Combined Sewer System Drainage Area Map



## Legend

City Limit	CSO04	CSO09	CSO14	CSO18	CSO24	CSO33	CSO40
CSO05	CSO10	CSO15	CSO19	CSO25	CSO34		
CSO06	CSO11	CSO16	CSO20	CSO26	CSO35		
CSO07	CSO12	CSO17	CSO21	CSO31	CSO39		

**CSO04 - Bloody Run  
Overflow Model Summary  
Current Month: January 2020**

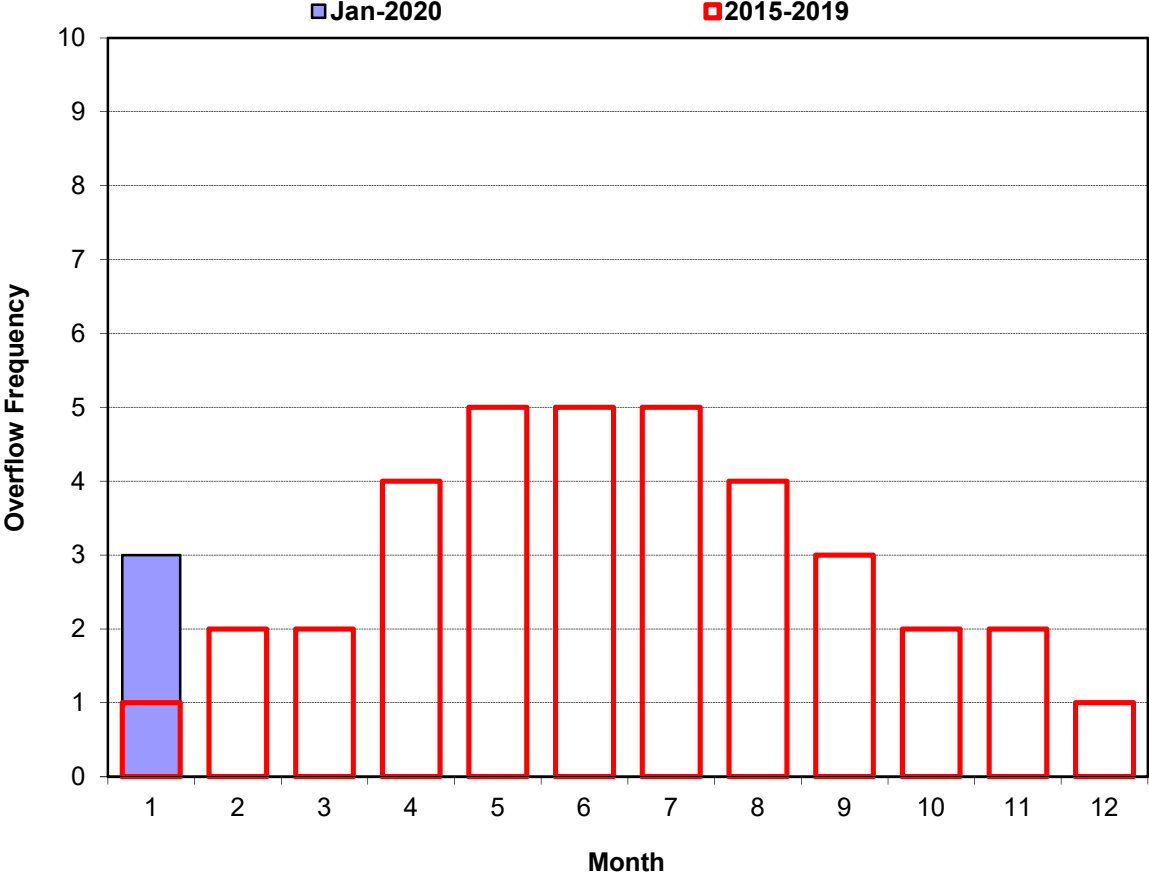
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20	1	0.44	0.67	1.68	0.13	0.58
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	0.29	3.58
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	0.15	1.58
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	3.59	14.58	1.68	0.57	5.75

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO05 - Peach Street  
Overflow Model Summary  
Current Month: January 2020**

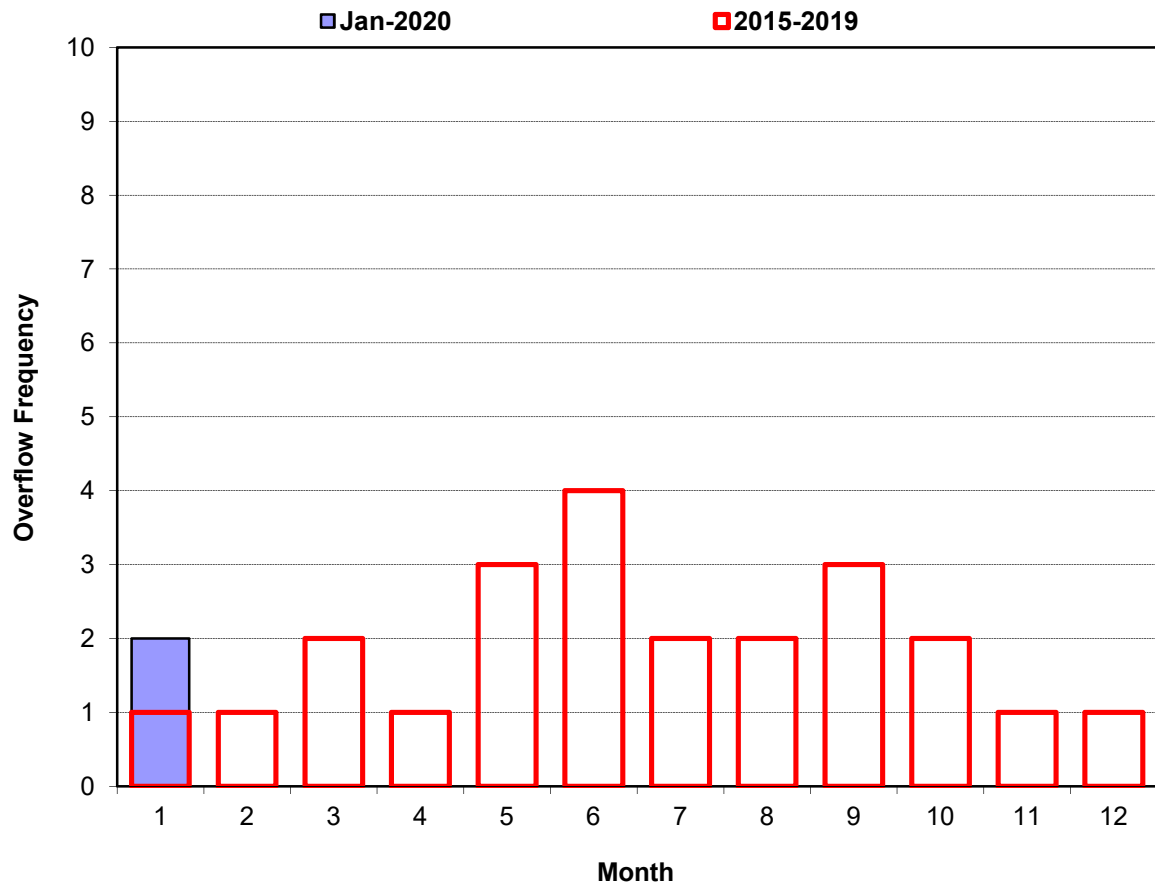
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	0.46	3.67
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	0.001	0.08
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
2	3.59	14.58	1.68	0.46	3.75

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO06 - Shockoe**  
**Overflow Model Summary<sup>†</sup>**  
**Current Month: January 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	63.9	8.58
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	13.3	5.33
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

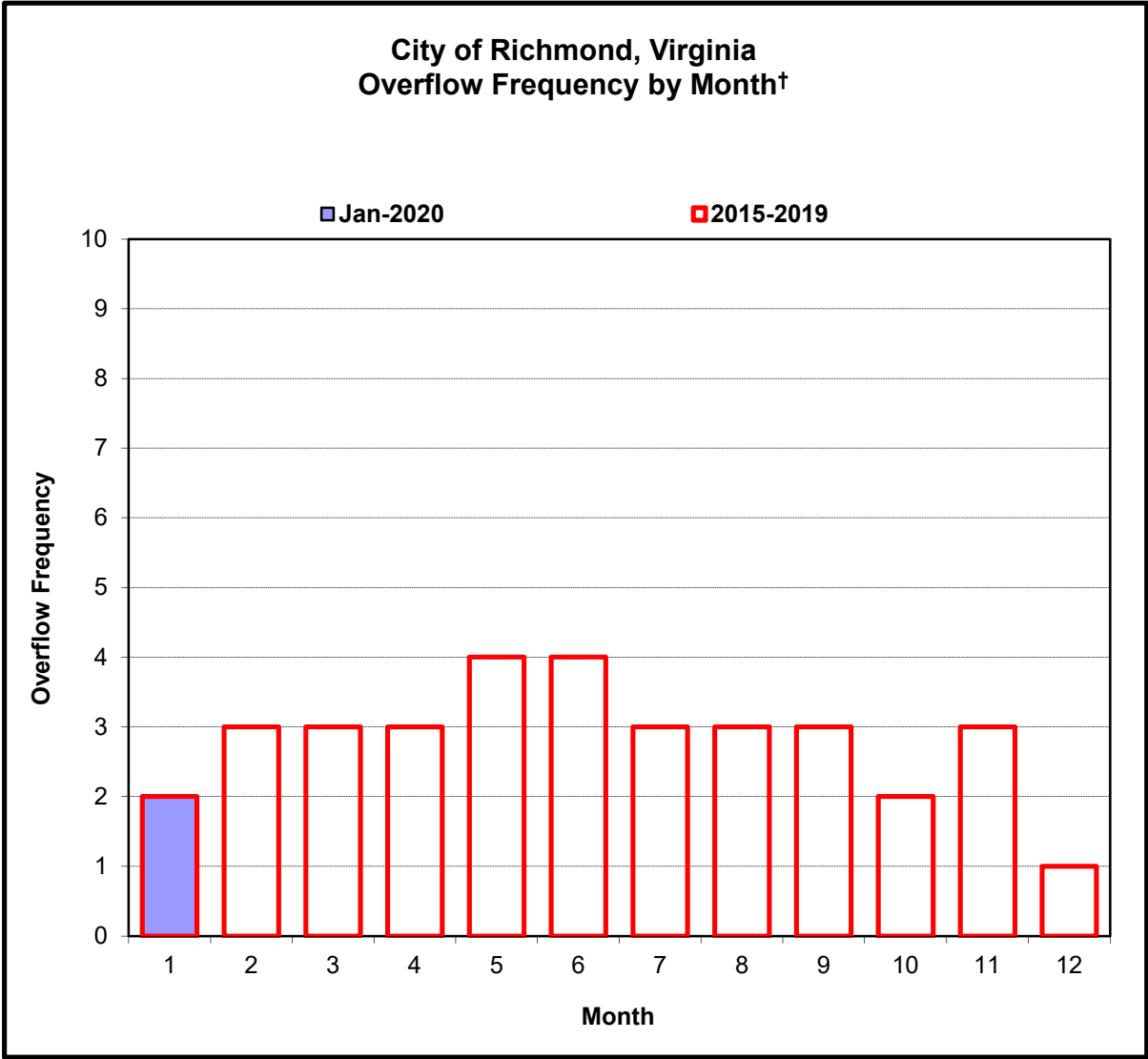
**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
2	3.59	14.58	1.68	77.20	13.92

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

<sup>†</sup> Permitted discharge when the capacity of CSO retention facilities are fully utilized.

### City of Richmond, Virginia Overflow Frequency by Month<sup>†</sup>



<sup>†</sup> Permitted discharge when the capacity of CSO retention facilities are fully utilized per SOP.



**CSO07 - Byrd  
Overflow Model Summary  
Current Month: January 2020**

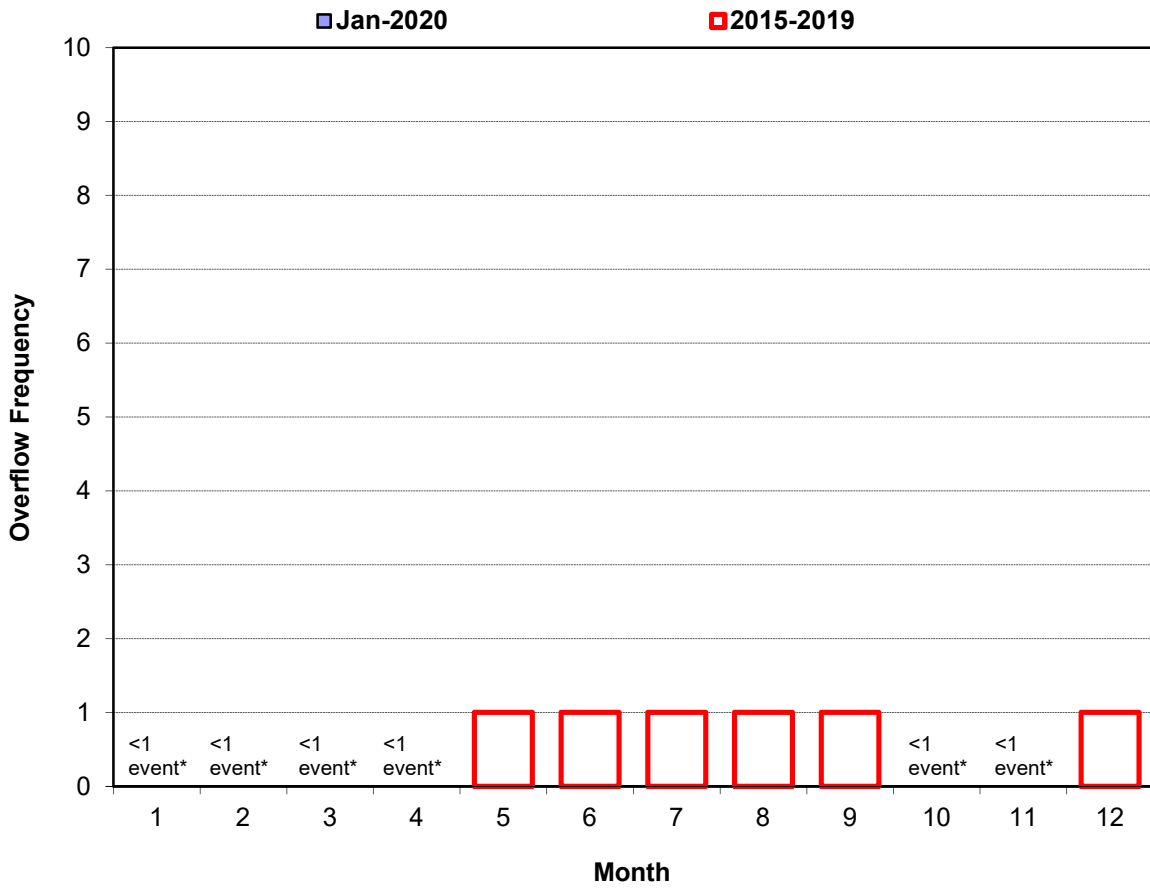
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO09 - 7th Street  
 Overflow Model Summary  
 Current Month: January 2020**

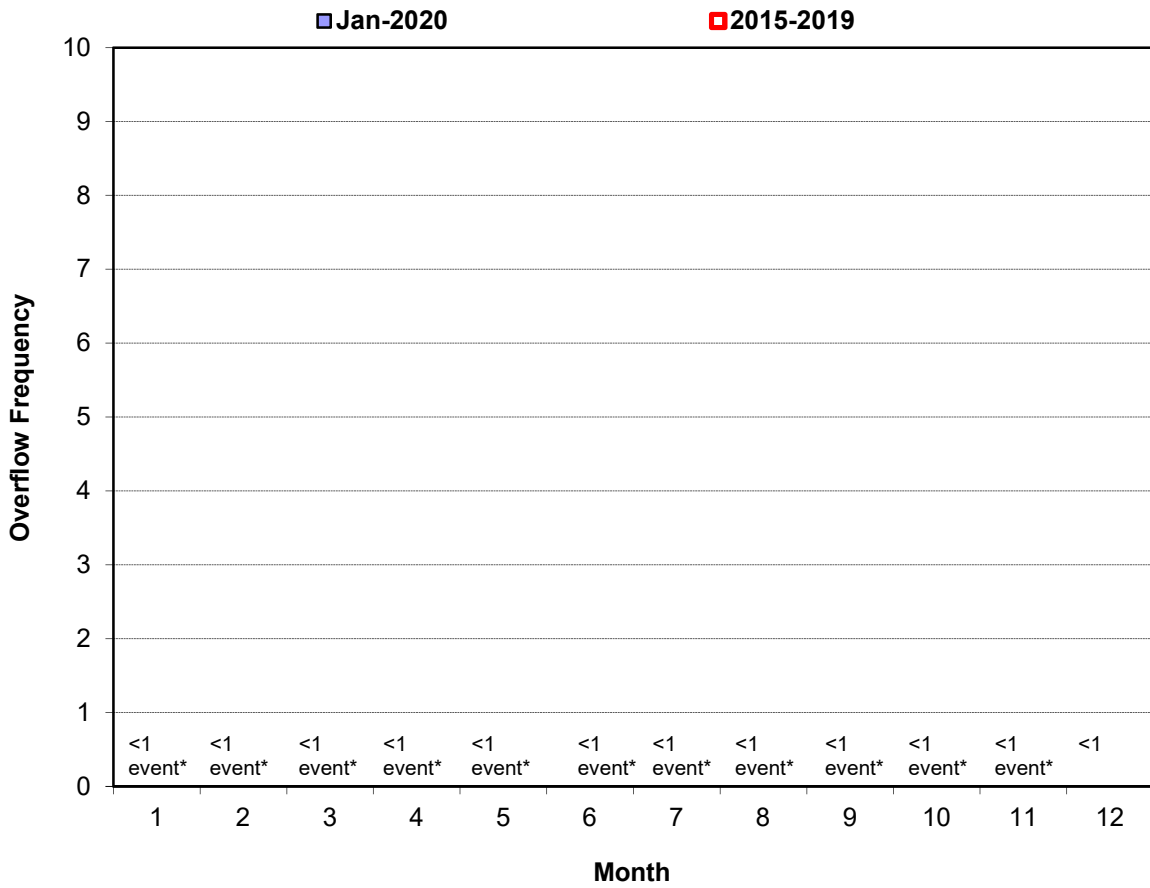
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO10 - Gambles Hill  
 Overflow Model Summary  
 Current Month: January 2020**

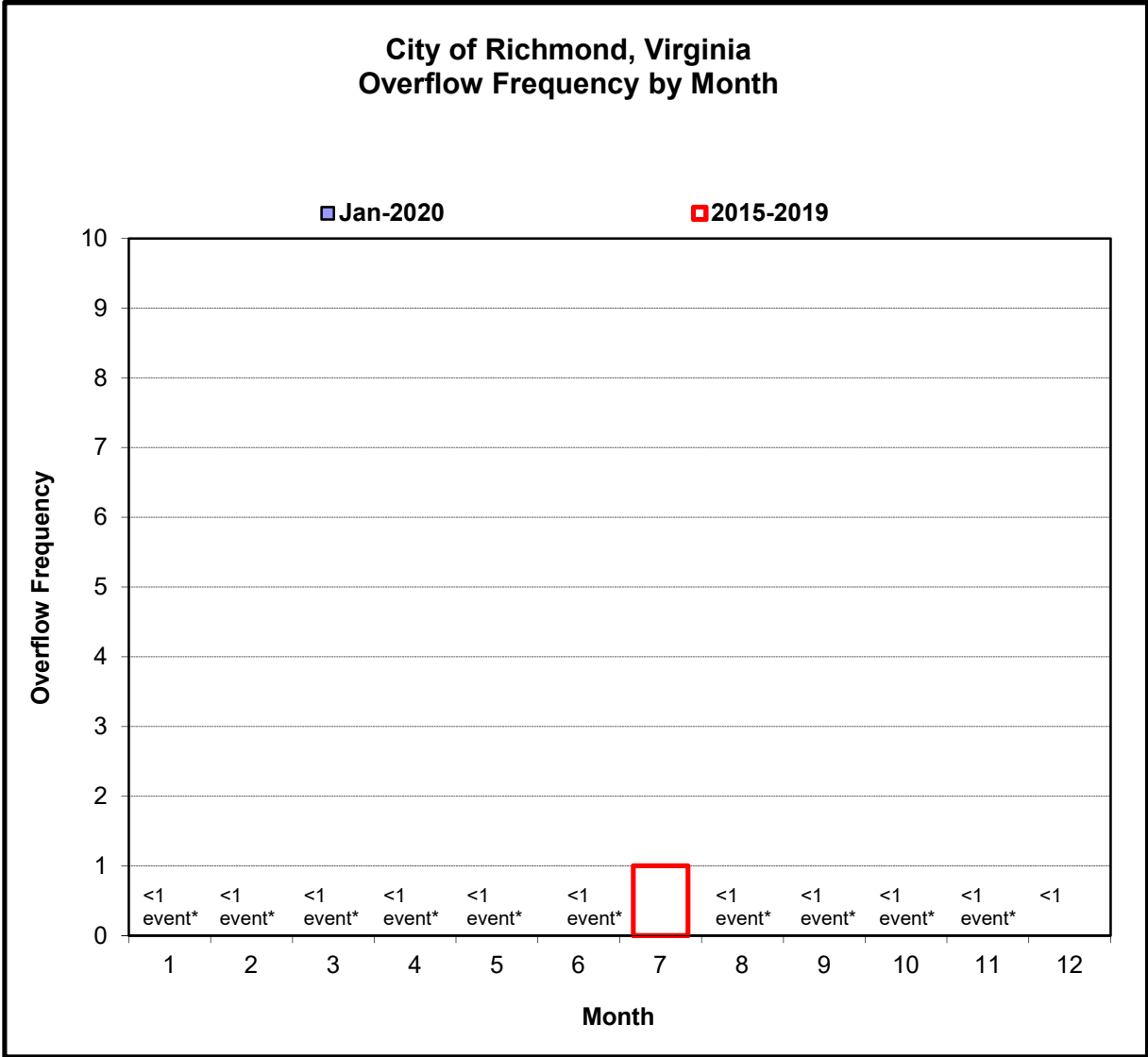
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

City of Richmond, Virginia  
Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO11 - Park Hydro  
Overflow Model Summary  
Current Month: January 2020**

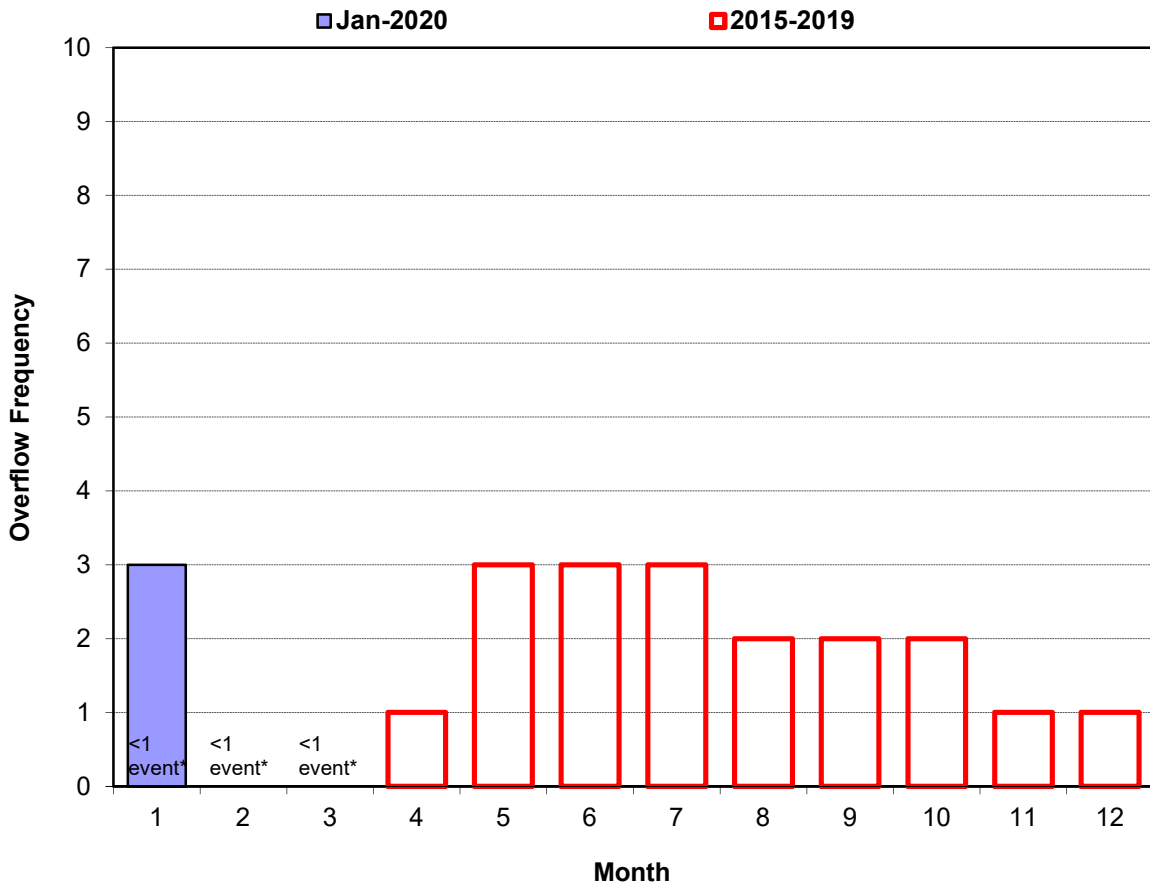
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20	1	0.44	0.67	1.68	1.3	0.92
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	9.5	3.42
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	7.9	1.67
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	3.59	14.58	1.68	18.70	6.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO12 - Hilton Street  
Overflow Model Summary  
Current Month: January 2020**

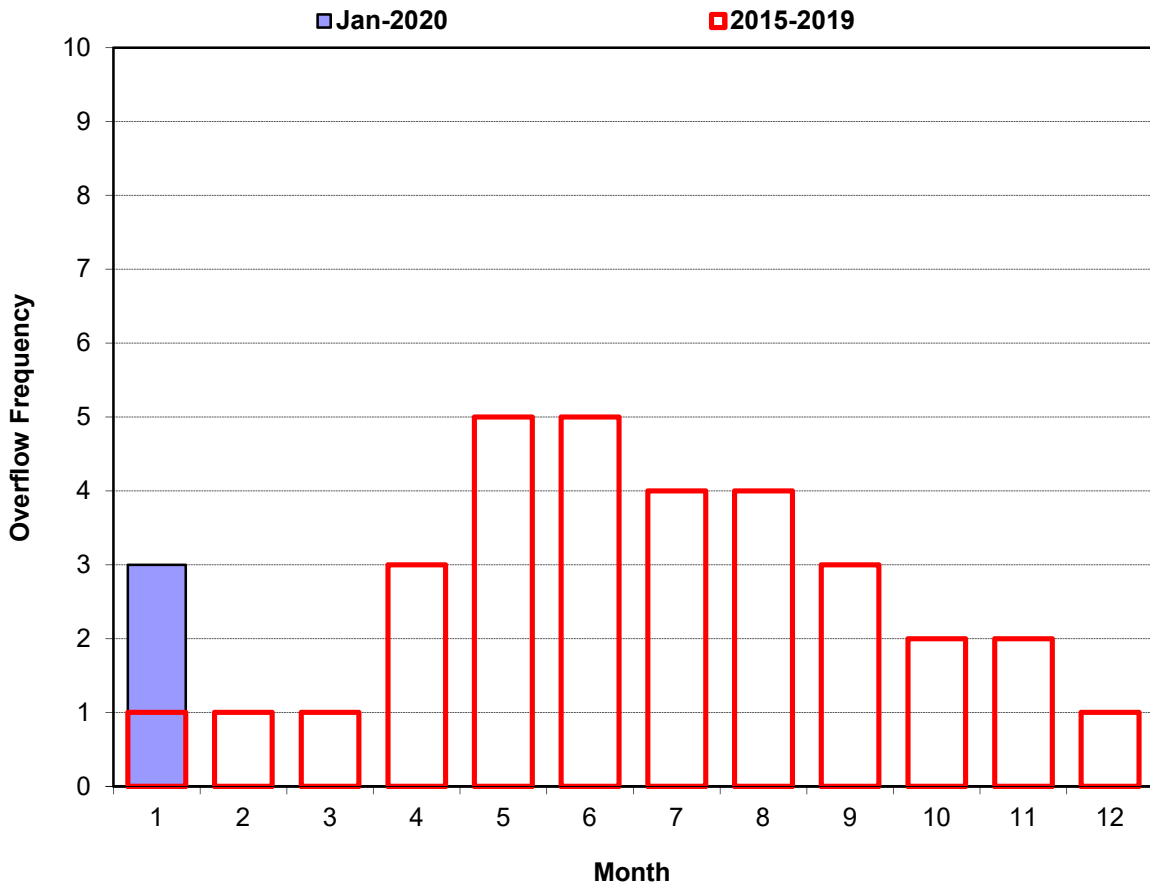
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20	1	0.44	0.67	1.68	0.1	0.50
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	0.29	3.33
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	0.15	1.58
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	3.59	14.58	1.68	0.53	5.42

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO14 - Stockton  
Overflow Model Summary  
Current Month: January 2020**

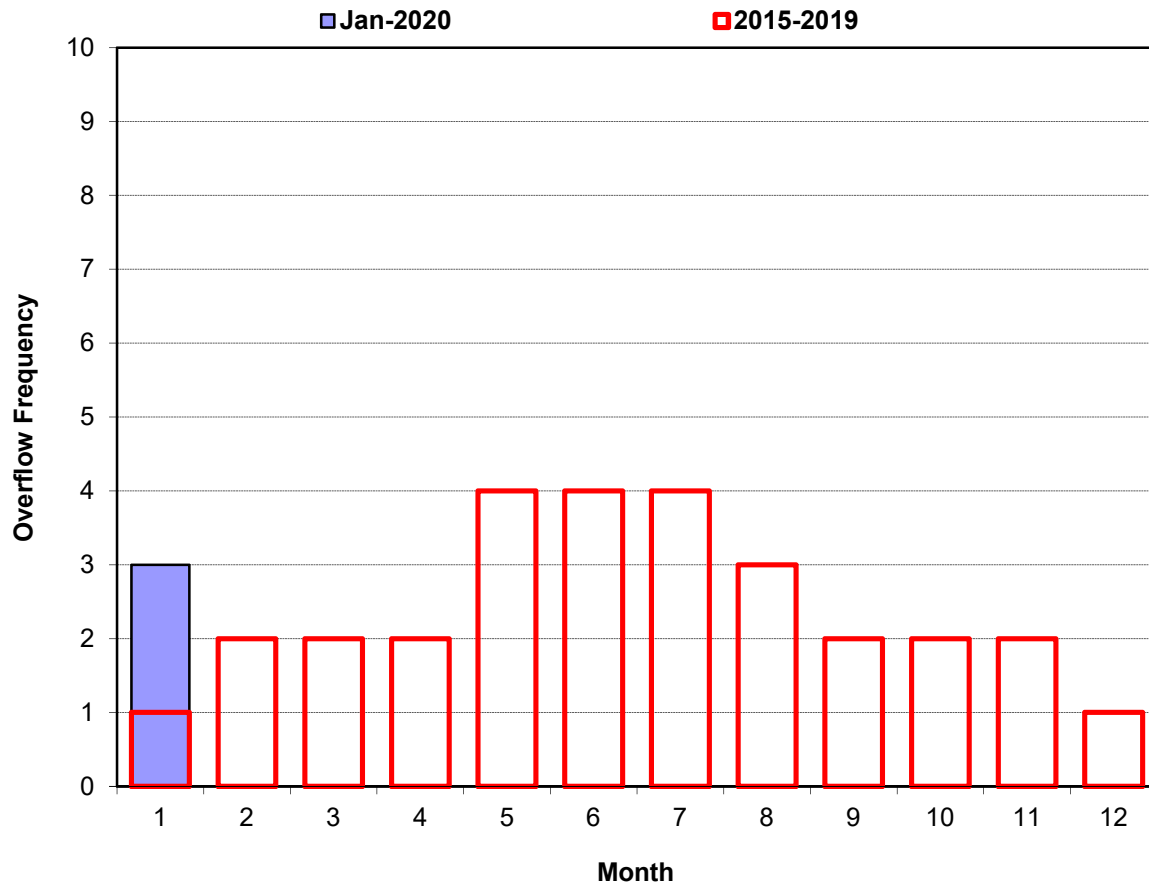
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20	1	0.44	0.67	1.68	0.85	0.67
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	3	3.92
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	1.4	1.58
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	3.59	14.58	1.68	5.20	6.17

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO15 - Canoe Run  
Overflow Model Summary  
Current Month: January 2020**

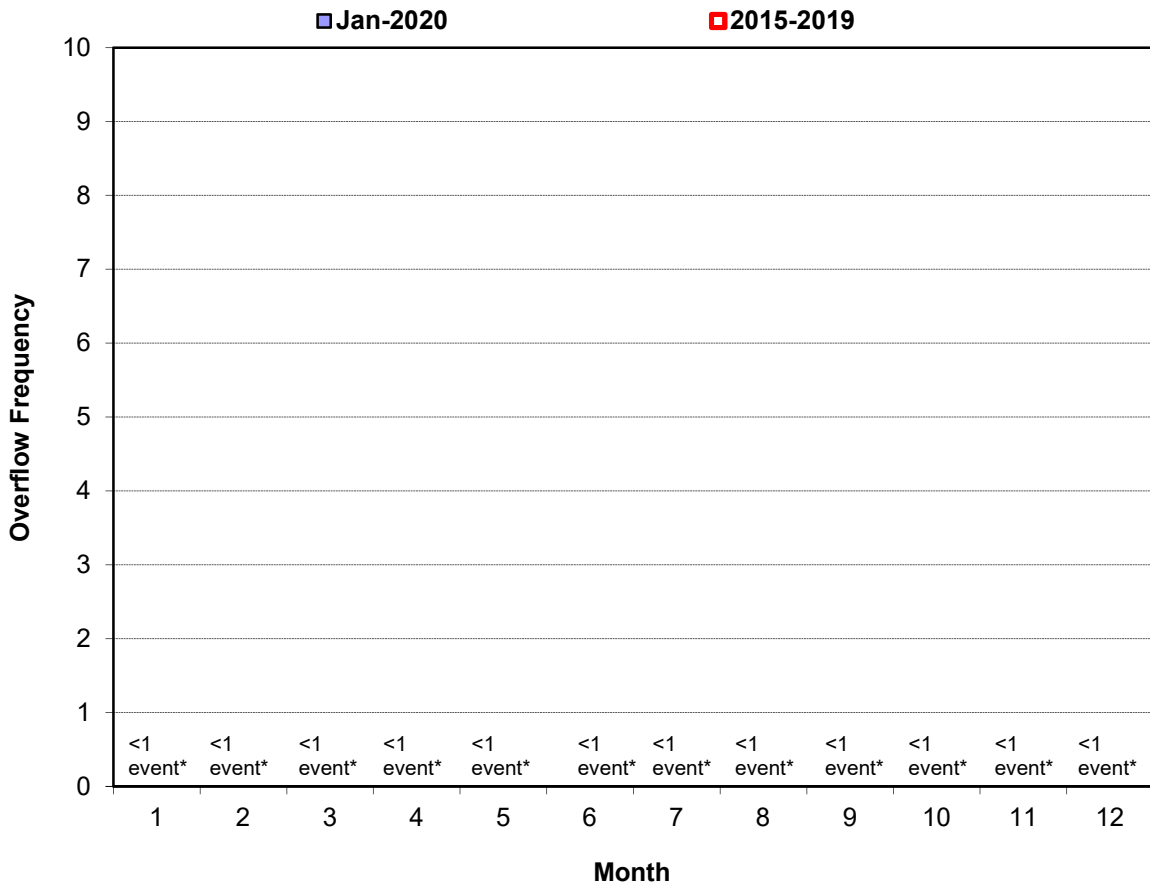
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO16 - Woodland  
Overflow Model Summary  
Current Month: January 2020**

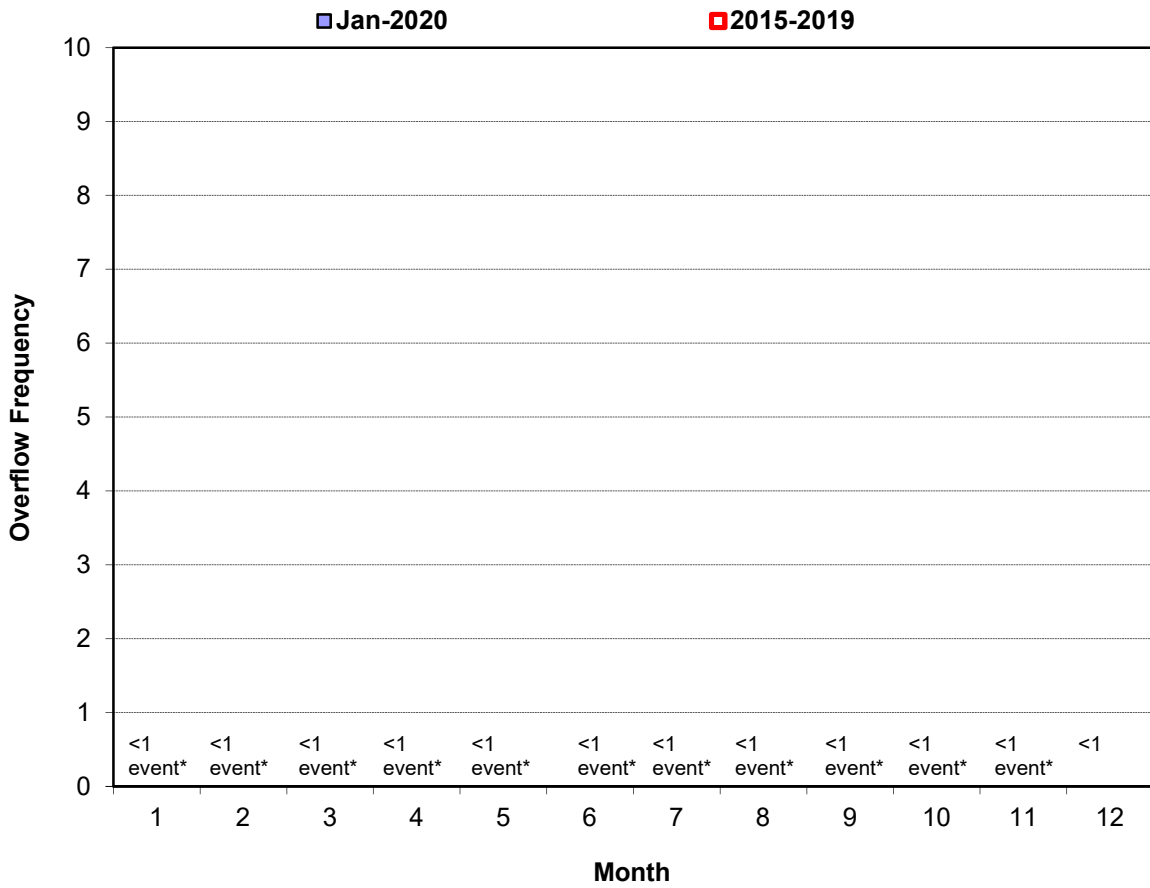
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO17 - Reedy Creek  
 Overflow Model Summary  
 Current Month: January 2020**

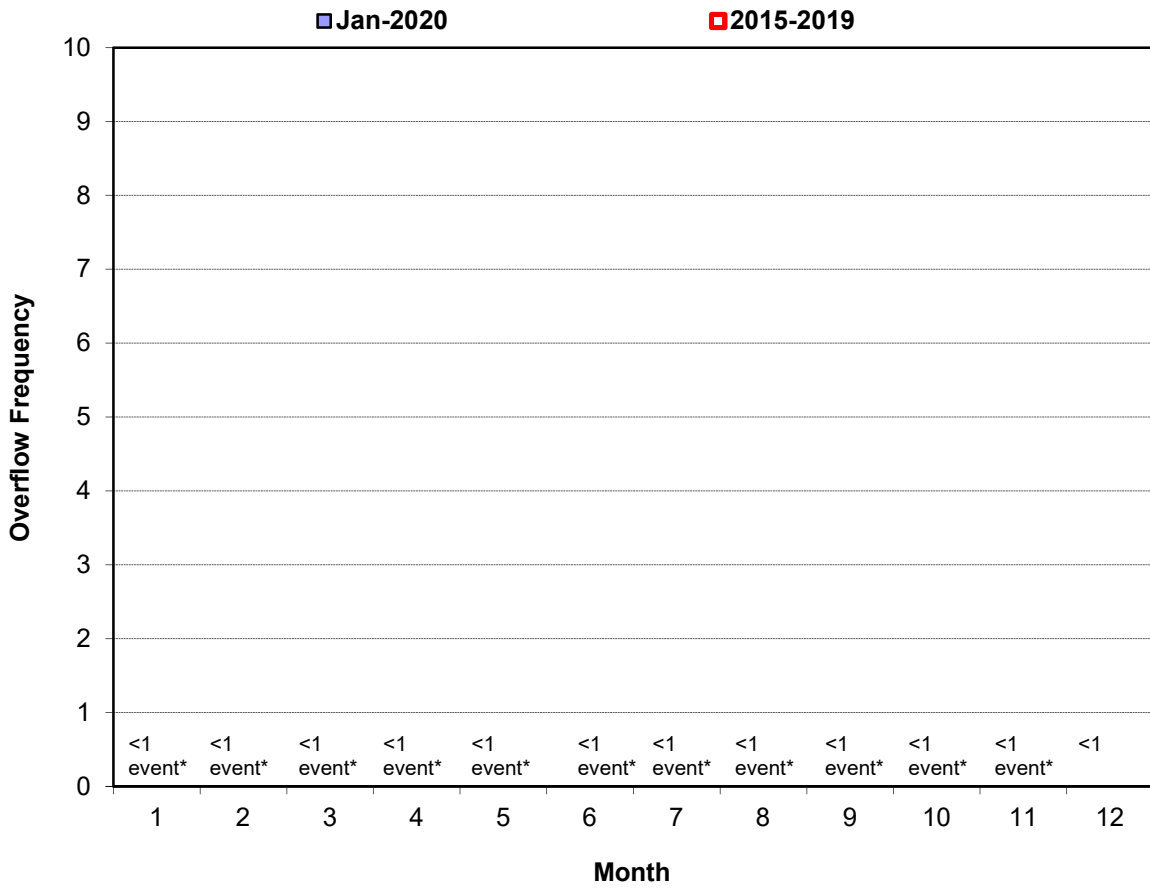
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO18 - 42nd Street  
Overflow Model Summary  
Current Month: January 2020**

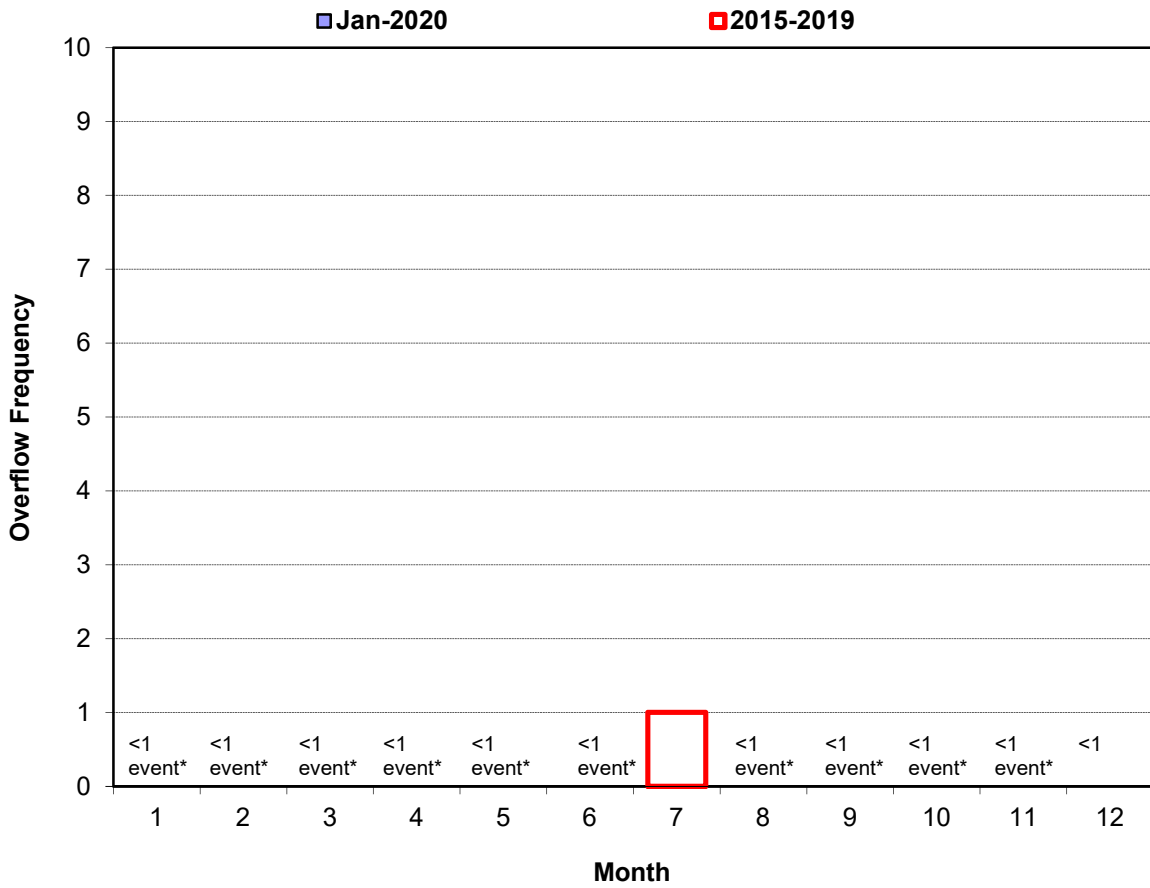
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO19 - Hampton  
 Overflow Model Summary  
 Current Month: January 2020**

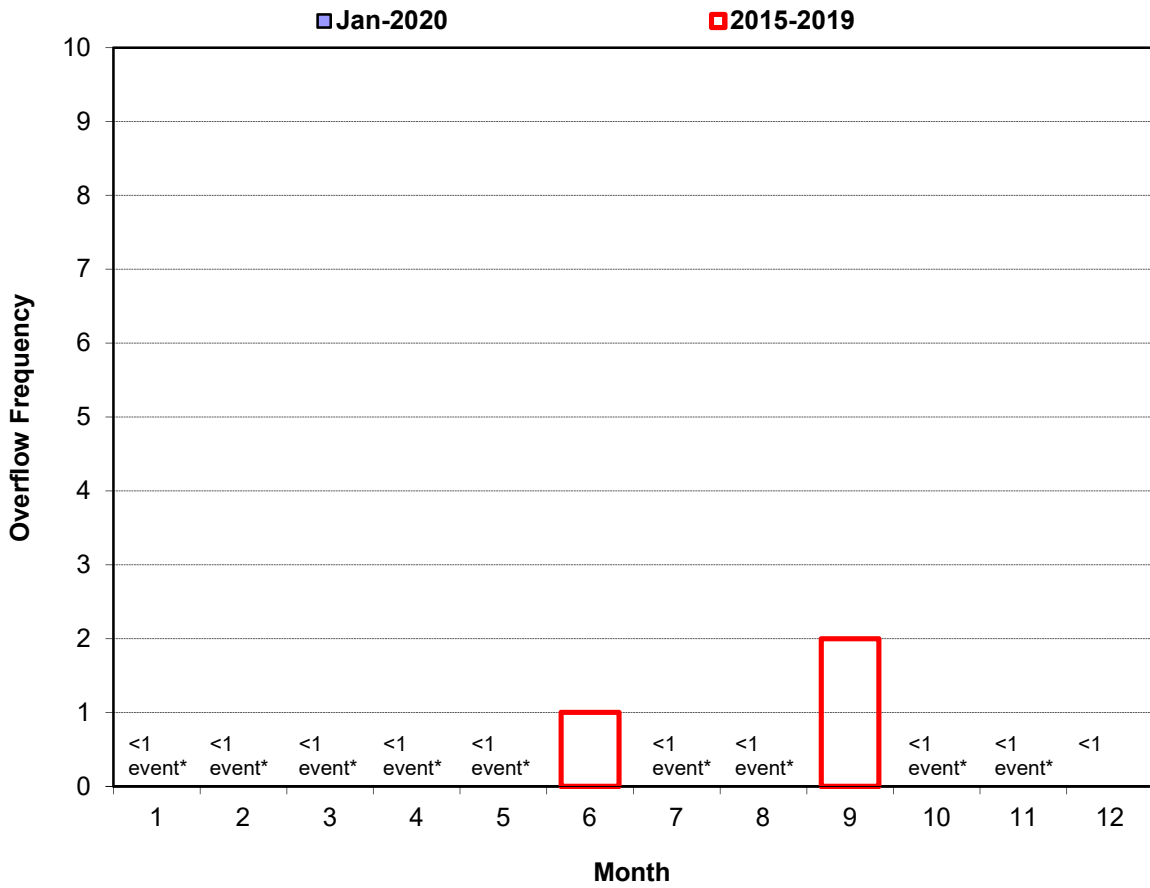
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO20 - Mc Cloy**  
**Overflow Model Summary**  
**Current Month: January 2020**

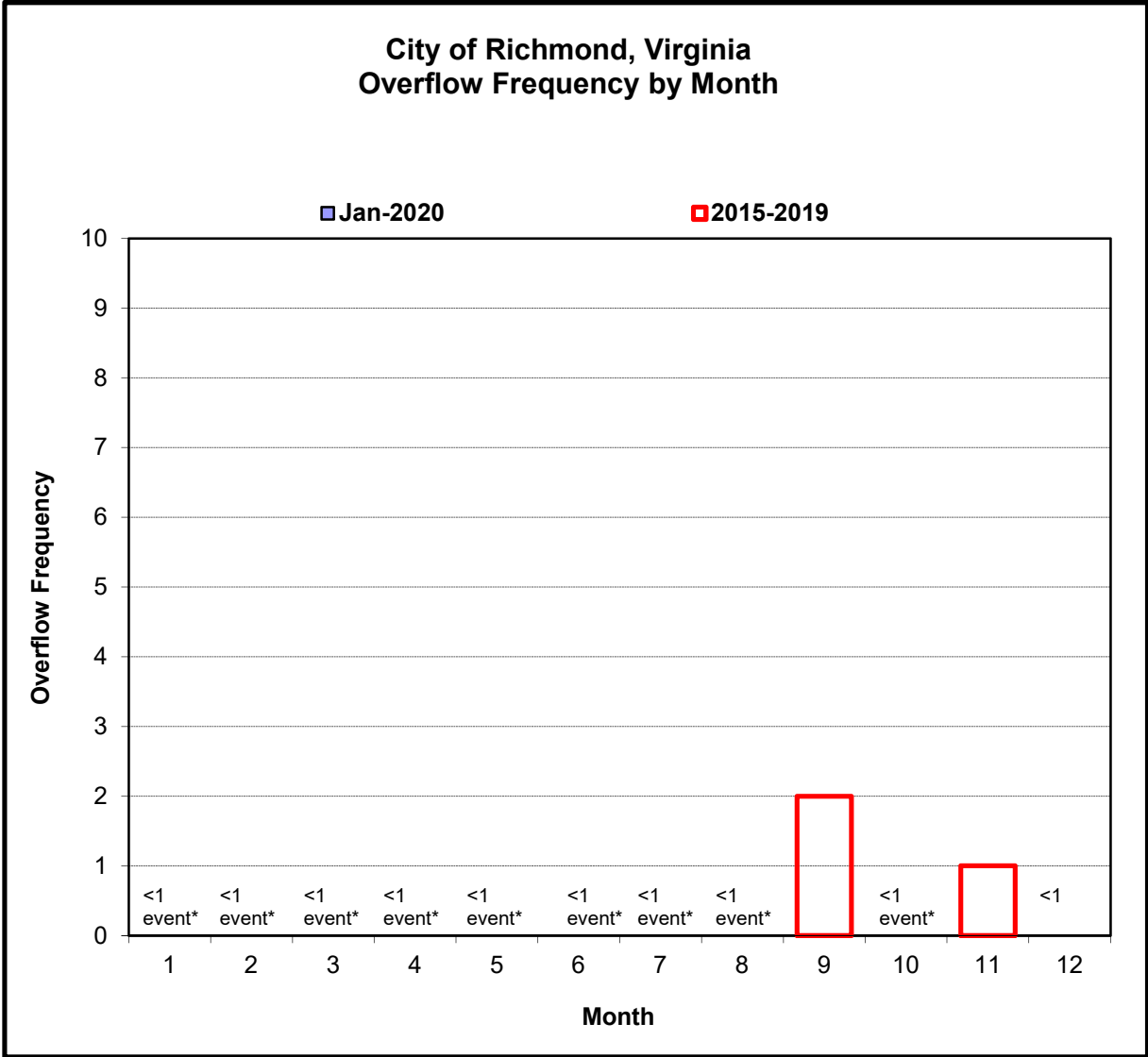
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO21 - Gordon Ave  
 Overflow Model Summary  
 Current Month: January 2020**

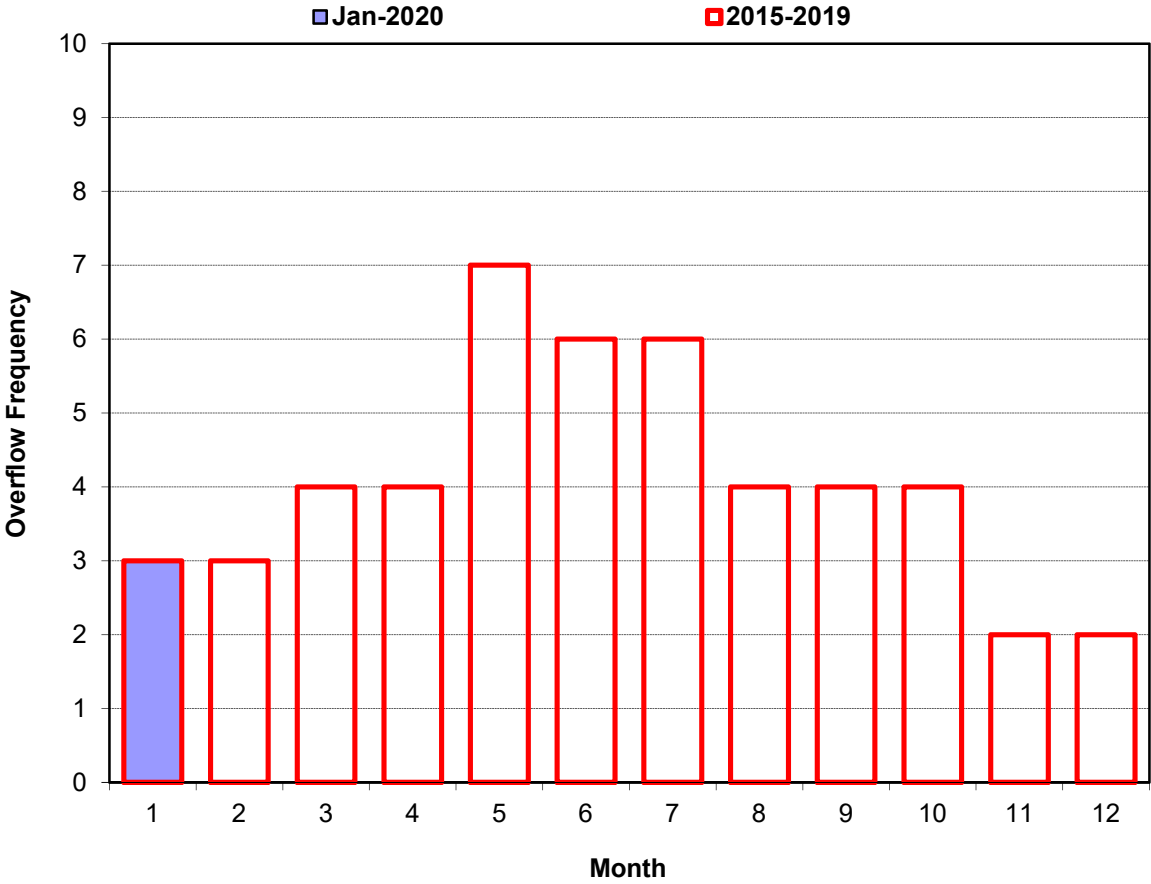
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20	1	0.44	0.67	1.68	1.30	0.75
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	8.30	7.42
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	1.40	4.92
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	3.59	14.58	1.68	11.00	13.08

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

City of Richmond, Virginia  
Overflow Frequency by Month



**CSO24 - Gillies & Varina  
 Overflow Model Summary  
 Current Month: January 2020**

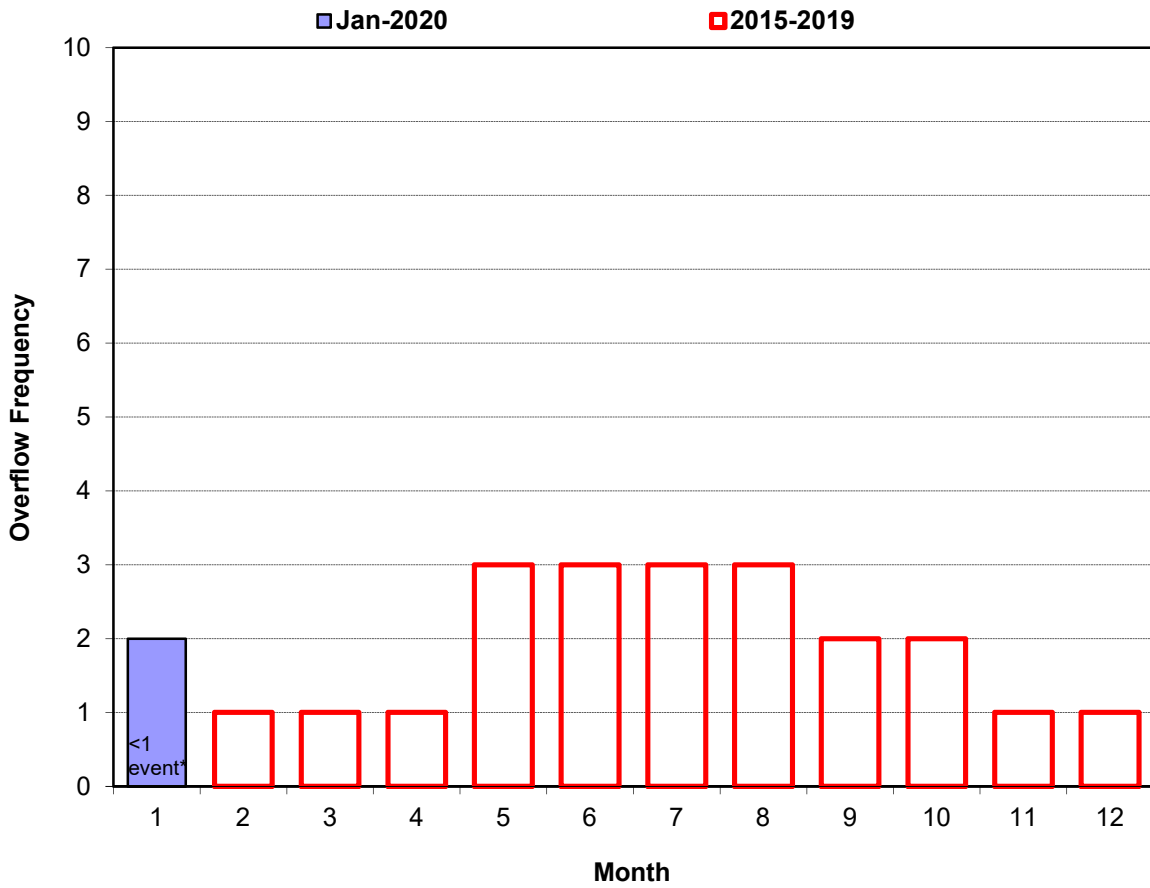
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	0.09	2.25
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	0.01	0.67
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
2	3.59	14.58	1.68	0.10	2.92

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO25 - Briel & Gillies Cr  
 Overflow Model Summary  
 Current Month: January 2020**

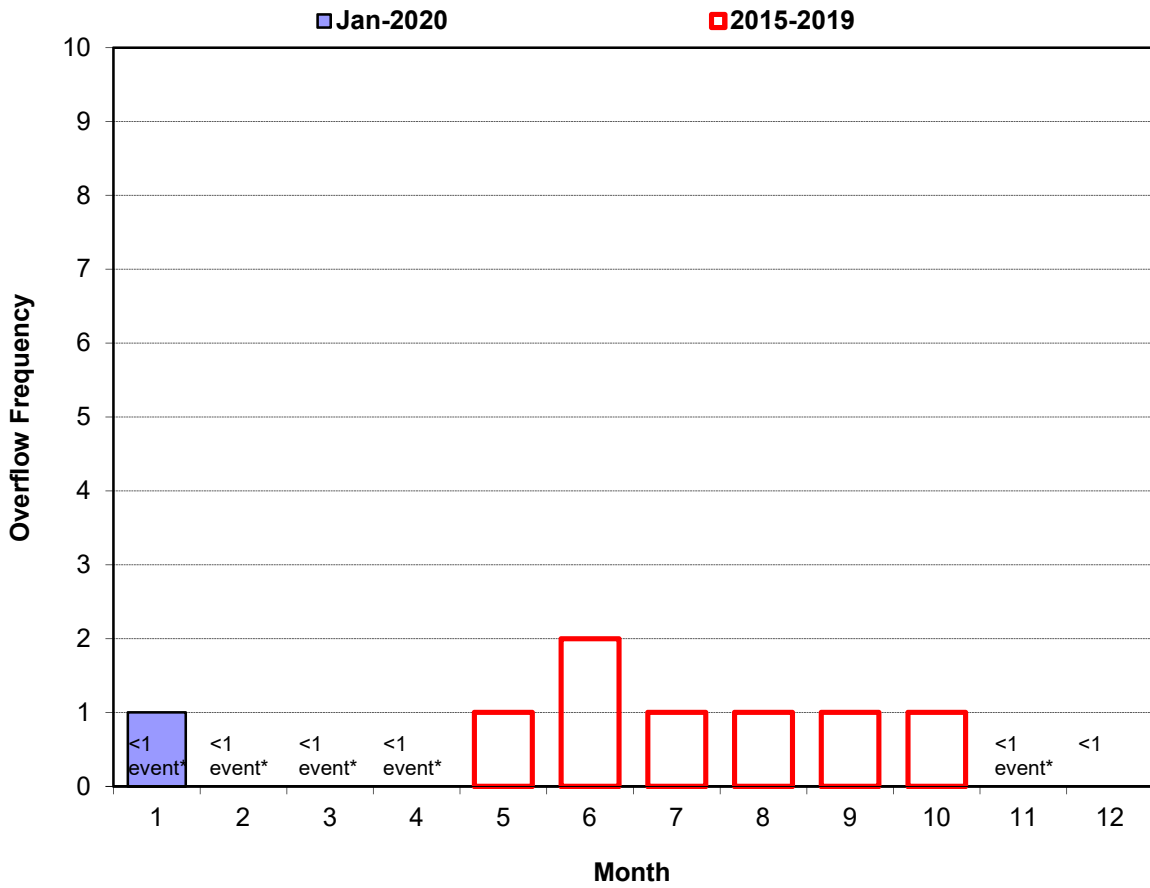
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	0.004	0.17
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
1	3.59	14.58	1.68	0.004	0.17

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO26 - Govt Road & NSRR  
 Overflow Model Summary  
 Current Month: January 2020**

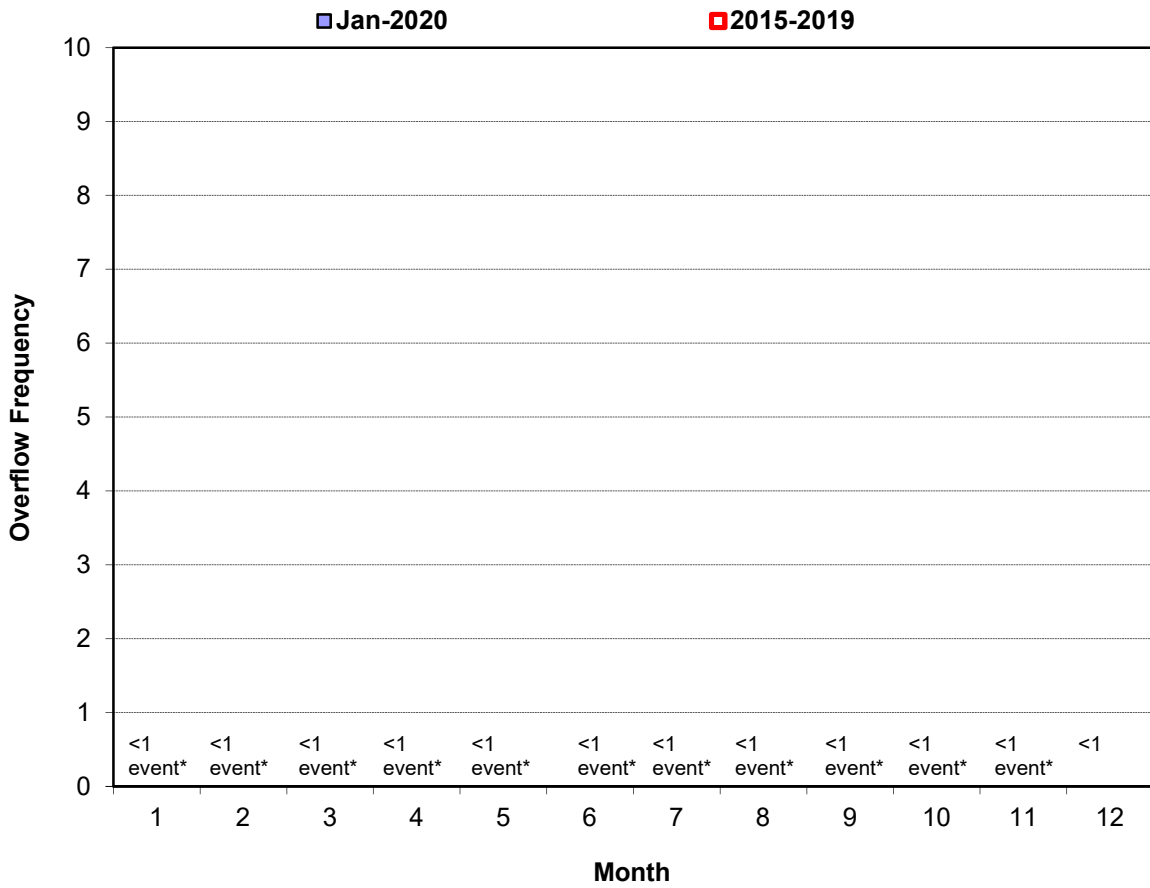
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO31 - Oakwood Cem  
Overflow Model Summary  
Current Month: January 2020**

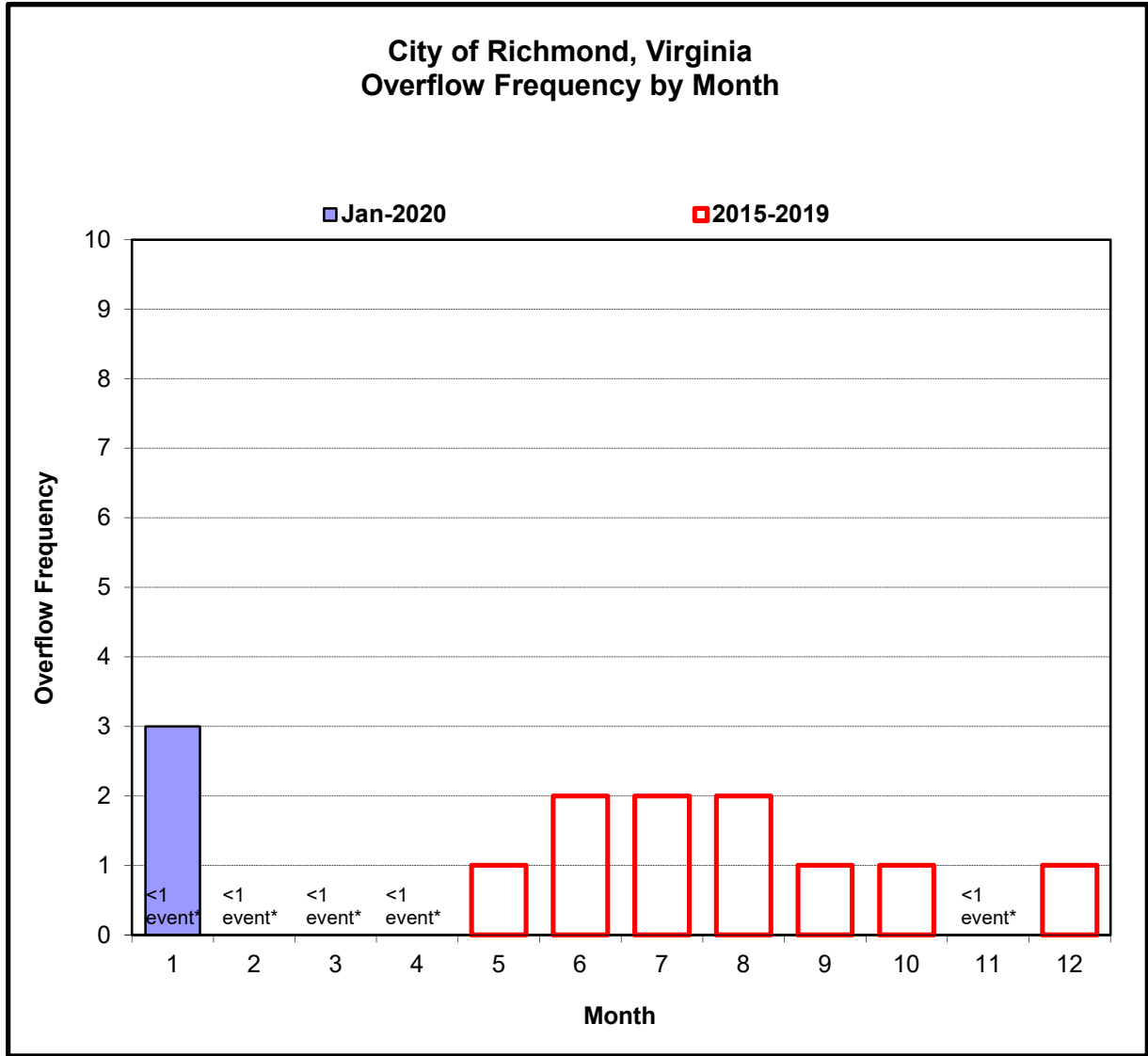
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20	1	0.44	0.67	1.68	0.04	0.08
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	0.01	0.08
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	0.004	0.08
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	3.59	14.58	1.68	0.05	0.25

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO33 - Shields Lake  
Overflow Model Summary  
Current Month: January 2020**

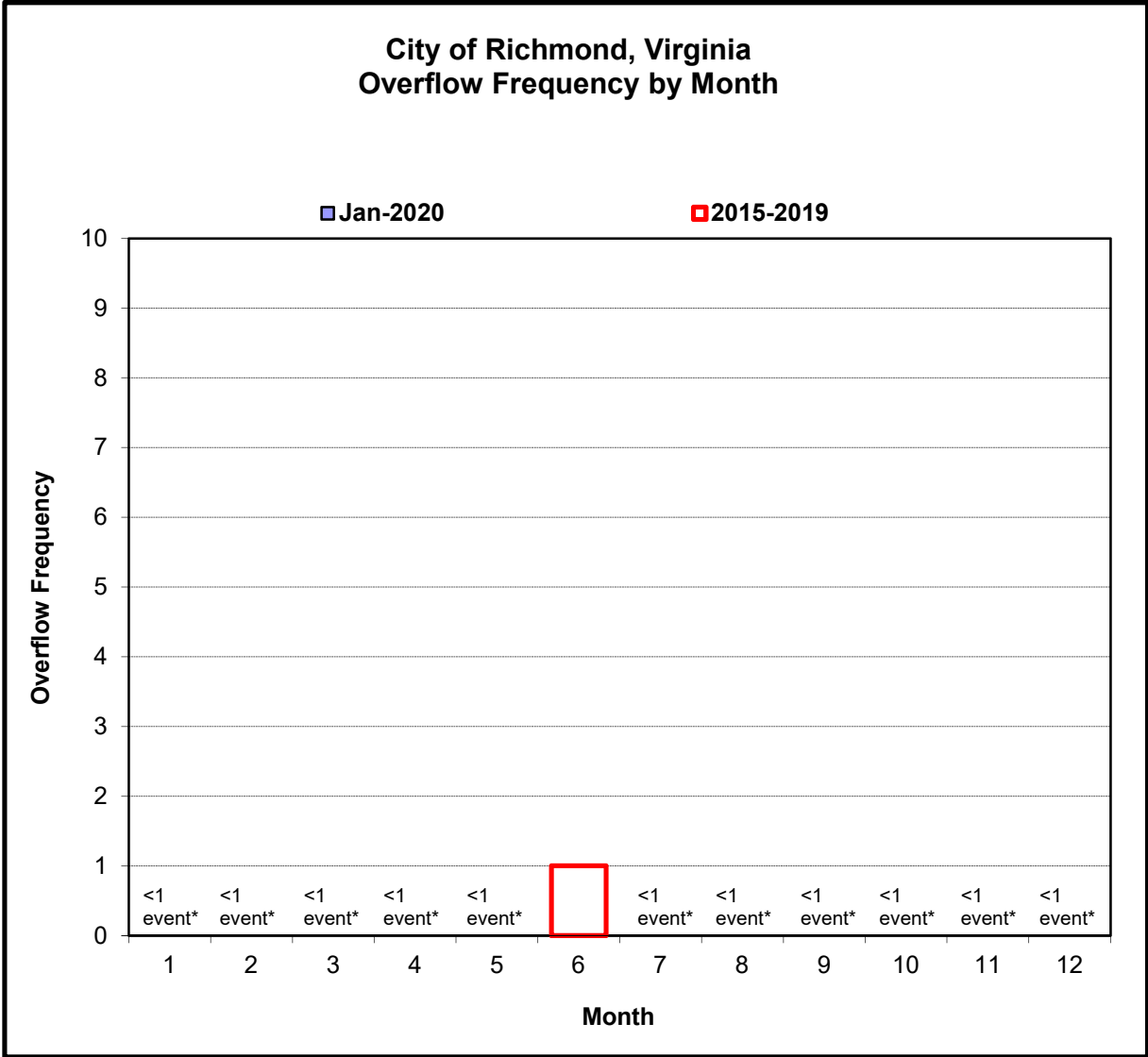
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO34 - 19th & Dock  
Overflow Model Summary  
Current Month: January 2020**

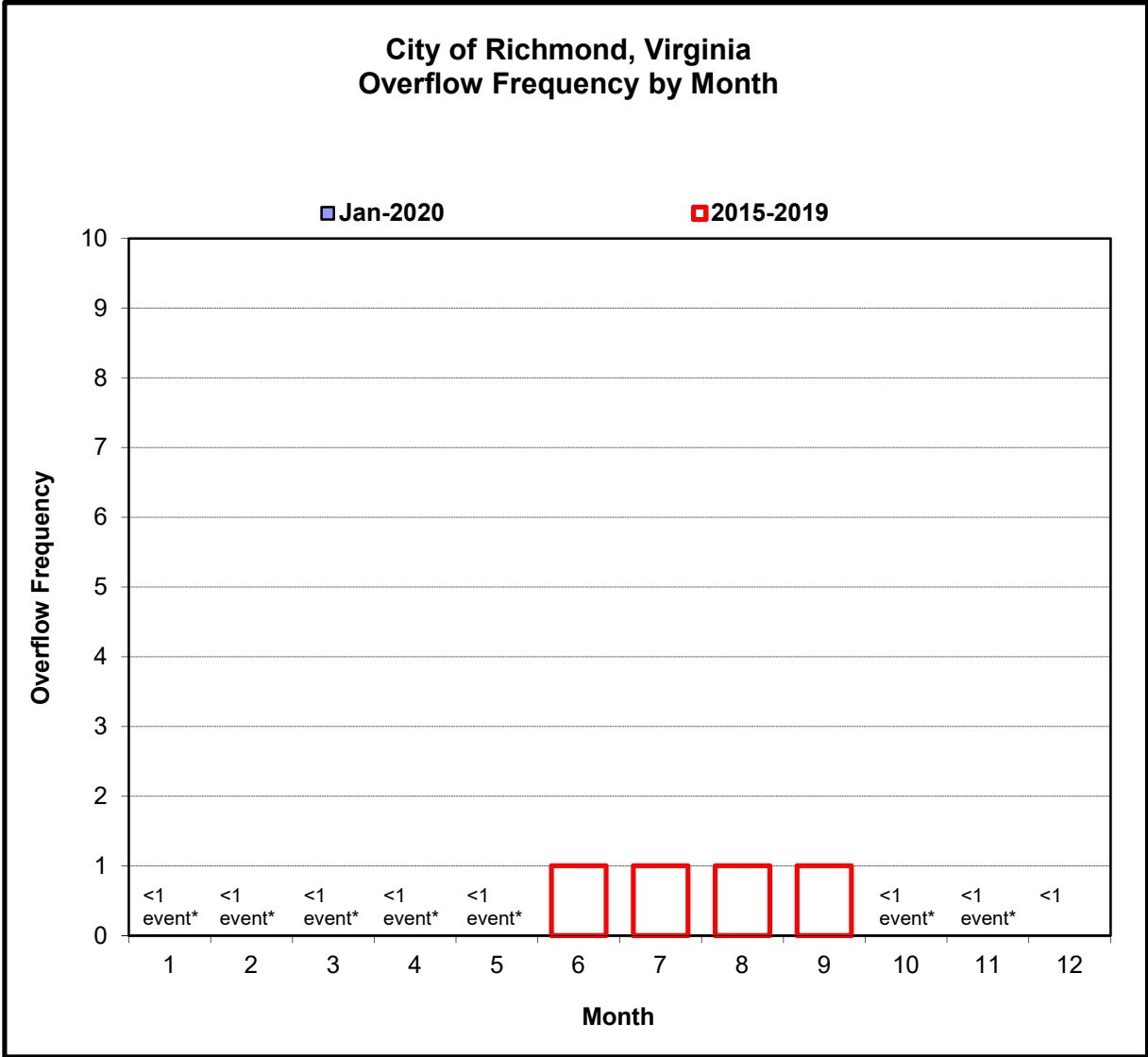
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.

**CSO35 - 29th & Dock  
 Overflow Model Summary  
 Current Month: January 2020**

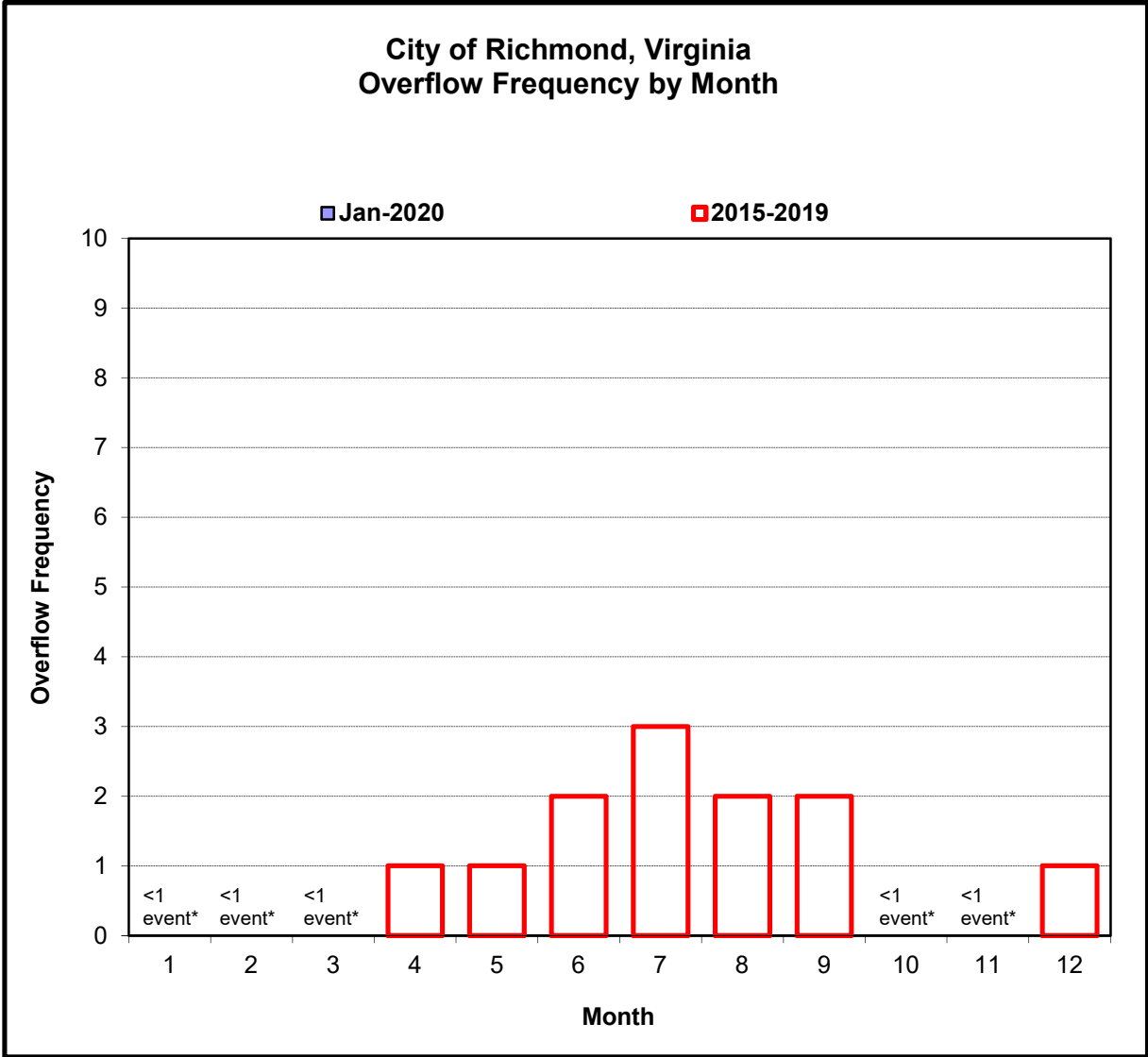
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20		0.44	0.67	1.68		
1/13/20		0.01	0.08	0.12		
1/14/20		1.21	3.75	1.68		
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20		0.76	2.58	0.84		
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
0	3.59	14.58	1.68	0.00	0.00

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



\* Average Overflow Frequency is less than once in the month.



**CSO39 - Govt Road & Gillies  
 Overflow Model Summary  
 Current Month: January 2020**

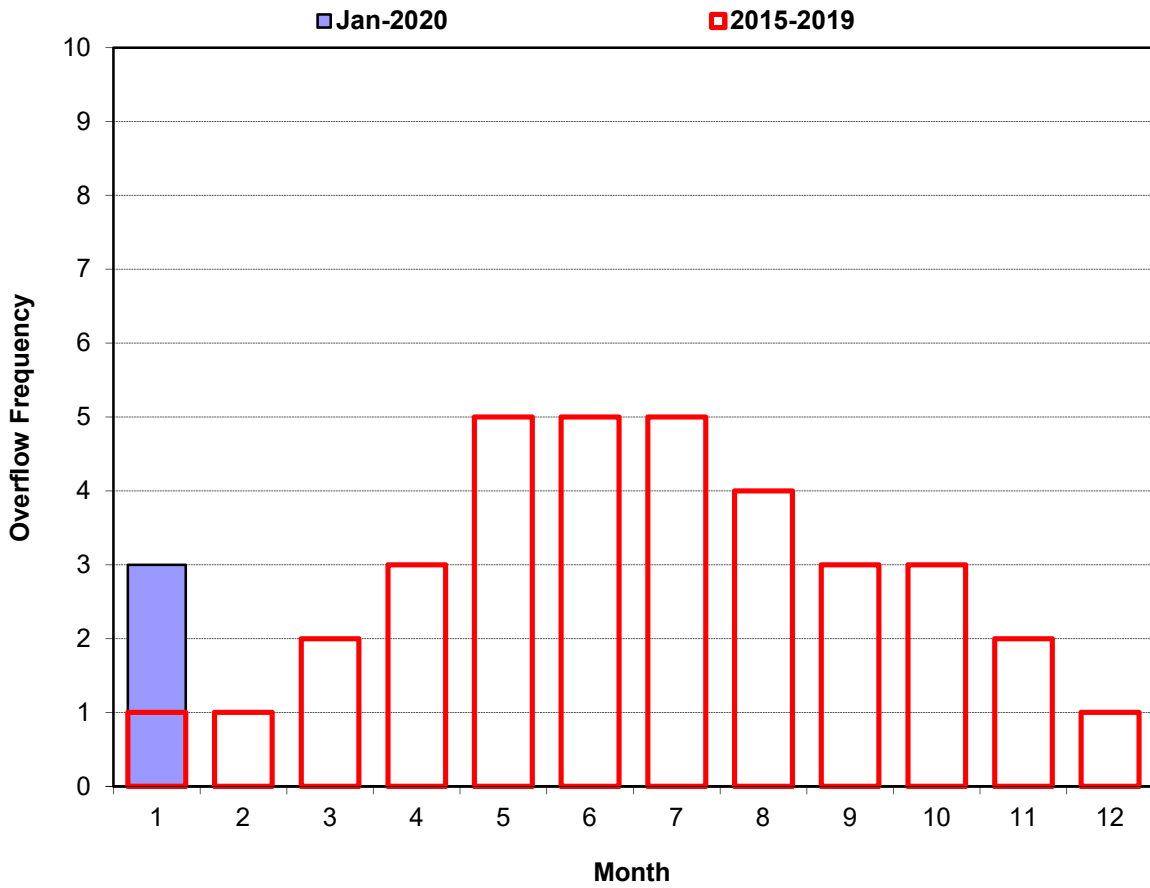
Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20	1	0.44	0.67	1.68	0.13	0.50
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	0.36	3.33
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	0.18	1.58
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	3.59	14.58	1.68	0.67	5.42

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month



**CSO40 - Diff User**  
**Overflow Model Summary**  
**Current Month: January 2020**

Date	Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hr)
1/1/20						
1/2/20						
1/3/20		0.19	1.33	0.24		
1/4/20		0.38	2.42	0.48		
1/5/20						
1/6/20						
1/7/20		0.33	1.67	0.48		
1/8/20						
1/9/20						
1/10/20						
1/11/20		0.01	0.08	0.12		
1/12/20	1	0.44	0.67	1.68	0.64	2.33
1/13/20		0.01	0.08	0.12		
1/14/20	1	1.21	3.75	1.68	1.20	4.08
1/15/20						
1/16/20						
1/17/20						
1/18/20		0.12	0.92	0.24		
1/19/20						
1/20/20						
1/21/20						
1/22/20						
1/23/20						
1/24/20						
1/25/20	1	0.76	2.58	0.84	0.73	2.75
1/26/20						
1/27/20						
1/28/20						
1/29/20						
1/30/20						
1/31/20		0.14	1.08	0.24		

**MONTH SUMMARY**

Num of Overflow	Rainfall <sup>(1)</sup> Total (in)	Hours of <sup>(1)</sup> Rainfall	Max. Rainfall <sup>(1)</sup> Intensity (in/hr)	Volume of Overflow (MG)	Duration of Overflow (hrs)
3	3.59	14.58	1.68	2.60	9.17

<sup>(1)</sup> Based on the NWS Station at Richmond Airport (KRIC ASOS) rainfall data.

### City of Richmond, Virginia Overflow Frequency by Month

